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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations of inventorship (Rule 4.17(iv)) for US only

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(54) Title: COMBINATORIAL SURFACE CHIP COMPOSITIONS FOR SELECTION, DIFFERENTIATION AND PROPAGATION OF CELLS

(57) Abstract: A combinatorial library high-throughput technique for varying polymer surface structures has been developed that allows rapid, efficient, and accurate investigation of the effects of microstructure, roughness, and surface chemistry on stem cell adhesion, proliferation and differentiation. Bioactive molecules, such as cytokines, growth factors, and extracellular matrix components can be attached to the surfaces to bind to and/or modify the cell characteristics.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/11970

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : C12Q 1/00; C12N 5/00; C07K 14/475  
US CL : 435/4, 5, 6, DIG. 1, DIG.34; 436/518

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 435/4, 5, 6, DIG. 1, DIG.34; 436/518

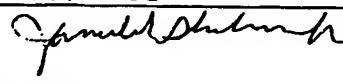
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
none

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WEST, DERWENT, CAPLUS, MEDLINE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,776,747 (SCHINSTINE et al) 07 July 1998, see the entire document.	1-13

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
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"P"	document published prior to the international filing date but later than the priority date claimed		

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